

LIST OF SAMPLING DUTIES FOR DOMESTIC FISHERIES OBSERVERS

Every Haul, Delivery, or Set:

1. Obtain haul, delivery or set data

Sampled Hauls, Deliveries or Sets: (numbered items presented in order of priority)

1. Sample for species composition of catch. Do not leave out any species or species group, such as sampling only for prohibited species. Try to sample the whole catch for king crab, Tanner crab, halibut and salmon if possible. You may have different sample weights for different species, therefore you may also sample the whole haul for obvious species like shark and large skate or species of interest like sablefish.
2. Estimate catch weight by the most accurate method available to you. (May have to do this for every haul, delivery, or set if you cannot get accurate ship estimates.)

Biological data from prohibited species -

3. Sex and identify to species, all the salmon, king and Tanner crab in your sample (haul, delivery, or set) if possible, or take a random subsample for sexing.
4. Take length measurements of all halibut, salmon, king and Tanner crab in your sample. Subsample if necessary when incidence rates are high. A subsample should be of at least 20 fish or crab.
5. Determine the viability of all halibut, king and Tanner crab in your sample if possible; or take a random subsample; or sample specifically for viability at another time. (Presented in order of preference.)
6. Collect scales from salmon in your samples for species confirmation.
7. Check salmon for missing adipose fins, and other fish and crab for tags. If you collect a tag be sure to record all pertinent data as requested in Foreign Fisheries Observer Program (FFOP) manual.

Every Day:

8. Take length measurements of 150 randomly selected fish per day. Lengths should be taken of the target species unless you are also collecting otoliths of a sampling species other than the target species. Remember that the otolith collection must be a subset of the length frequency collection. If it is not possible to measure 150 fish per day, try to do at least 70 per day. You may have to forego sexing the fish.
9. Otolith/scale collection - Choose a sampling species from those listed on page 115 of the FFOP manual. We would prefer collections from species and areas not commonly fished by the foreign and joint venture operations such as Gulf of Alaska pollock, sablefish, and POP.

Per Cruise: (not in order of priority)

- Collect species and viability data from any captured marine mammals. Measure, determine sex, and remove canine teeth (when feasible) from any dead marine mammals.
- Evaluate the accuracy of the vessel's catch weight estimations and report on their method.
- Describe the fish processing products. Obtain product recovery rates.
- List what species are discarded.
- Make gear, factory and, if pertinent, weather deck diagrams.
- Detail incidences of net discarding and obtain net samples if possible.
- Calculate radio report messages and either phone them in at end of trip (short trips), or transmit them weekly via telex, rapidfax, or phone (trips over one week in length).
- Complete report including itinerary sheet, vessel diagram, gear diagram, and map of areas fished. Give complete answers to information asked for in report questions, plus anything else you feel would be helpful to staff members or future observers.

LIST OF CORRECTIONS FOR THE 1988 OBSERVER MANUAL

p. 43 In the 5th line from the bottom, delete "(Refer to "Prohibited Species Guidelines" in Section II)".

p. 64 Add the following to the bottom of the page:
"16. No decimals for ave. depths (only whole numbers)."

p. 68-71 A new list of catcher boats will be handed out during training. It will replace this list in the manual.

p. 76 The 4th line from the top of the page should read as follows: "thus changing to a partial whole-haul sampling method. In whole-haul sampling, the bycatch species"

p. 90 This page is obsolete. It will be replaced by copies of three different species description forms. These forms and an explanation of them, will be covered in training.

p. 119 Insert the following sentence before the first sentence of this page: "On some occasions, you may encounter large numbers of a priority species on a frequent basis. When this happens, collect at least 150 lengths daily and collect as many age structures as possible, using the random stratified technique."

p. 137 Add the following to the bottom of the page:
"17. Skip a line between hauls."

p. 145 Change item 17 to read as follows: " The codes for weather and sea conditions are given on the page following the form 2JV example.

p. 187 A copy of the subareas table will be handed out in class and should be inserted after this page.

p. 189 The following five species of rockfish should be withdrawn from the Slope Rockfish group and placed in a new report group called "POP Complex" with the abbreviation "POP". These five rockfish are: Northern rockfish, Pacific Ocean Perch, Rougheye rockfish, Sharpchin rockfish and Shortraker rockfish.

p. 210 Change the 5th line of the 2nd paragraph to read:
"venture company code: JA20): (Please Note: The PARA 1 information corresponds to the RM-1"

p. 211 Change the 6th line of the page to read: "area, and an "HW", followed by the sum of Column A from Form RM-3. Lastly, list the species report"

Also add the following sentence to the note in the middle of the page: "Also note that the PARA 2 information corresponds to the RM-3 example for the same dates on the preceding pages."

p. 227 Delete the word "average" from the 3rd sentence of the last paragraph, so that it reads: "Record only the "lowest" PRR test value and "highest" PRR test value and the lowest and highest unit weight test values on the Form 8 itself."

p. 253 Change the entry "1350" under the TIME (GMT) column, to read, "1230" and also change "1500" to "1430" in the same column.

p. 256 Before the last line of information on this page please add the following:

- The percentage of spawning females in your length sample. When you take length information from pollock, keep track of the number of spawning females (as described above)--on your length strips, for example. Convert this number to a percent of total pollock, as follows:

$$\frac{\text{\# spawning female pollock in sample}}{\text{total \# of female pollock in sample}} \times 100 = \% \text{ of spawning female pollock}$$

INSTRUCTIONS ON FILLING OUT DOMESTIC TRAWLER DATA FORMS

FORM 2US--HAUL FORM FOR U.S. TRAWLER

This form summarizes stern trawler fishing effort and total catch by haul. Obtain the data for this form from the ship's logs (if available), from vessel personnel, and from direct observation. Check carefully to see that no errors are made in copying the data to the forms and that the data are reasonable. Points to note:

1. Collect Form 2US data for the entire period you are aboard. Make certain that you have all of the hauls recorded for the days you begin and end sampling. (Port Moller cod fishery observers--if possible, collect these data for the entire period, but if this is not possible, make sure that you have the data for all hauls taken in area 512, or for any other period that you are able to sample.)
2. The identifying cruise number and vessel code will be assigned after you return and will be different for each vessel you are on. Keep the data for each cruise separate.
3. Place a check mark in the far left column to indicate which hauls you sampled.
4. A given haul number should be used only once - no duplicates. The haul numbers must be in numerical sequence. Make sure that the haul numbers do not exceed 3 digits. (If the haul number recorded in the fishing log is 1657, for instance, then drop the first digit and call the haul 657. This will enable you to more easily compare your data with the ship's.) All hauls must be recorded unless there was a gear malfunction resulting in a zero catch. A haul number must be assigned to every haul. If you reach number 999, the next haul should be "1", not "0." Haul number "0" means a nonfishing day.
5. Leave the "merge" column blank (col. 19).
6. Enter the gear type:
 - 1 - bottom trawl -Common otter trawl corresponding closely to the bottom trawl diagram provided to you. This type of net is designed to drag on or close to the bottom, and may be equipped with chafing gear, rollers, or bobbins.)
 - 2 - pelagic trawl - (Trawl designed to fish off-bottom. Wings may be of very large mesh or composed of lines. The net seldom has chafing gear, rollers, or bobbins, and is designed to minimize drag.)

Leave this column blank temporarily if the gear doesn't fit either category.

7. Enter the gear performance code:
- 1 - no problem
 - 2 - problem--crab pot was in the haul
 - 3 - problem--net hung up on some bottom obstacle (vessel had to back down)
 - 4 - problem--net ripped
 - 5 - problem--other problem
8. Enter the processing mode: (Indicates where the utilized fish from that haul are processed)
- 1 - Most of the processing is done on board the catcher vessel (a catcher/processor). The products are placed in a freezer hold and the trip usually lasts more than a few days.
 - 2 - The catch is delivered to a mothership at sea for processing.
 - 3 - Utilized catch is delivered to a shorebased processing plant. The trip usually lasts no more than 3 to 4 days and in the meantime the catch is kept on ice.
9. For the location code, enter R if the location in columns 25-33 is a retrieval position, D if it is the position of the delivery to a mothership, and N if it is a noon position on a nonfishing day.
10. If there were no hauls on a given day (due to bad weather, mechanical breakdowns, traveling etc.) enter the GMT noon position in columns 25-33 and enter 0 in the haul number column. In columns 34-72, comment on the reason there was no fishing. All days at sea must be accounted for in this manner.
11. The location entered should be the haul retrieval position -the location of the ship when a particular haul is begun to be retrieved, i.e. when the winches begin bringing in the cable. Check the latitude and longitude for all trawl retrieval positions and noon positions to make sure that they are reasonable - i.e., 58°63' does not exist; double check positions that indicate large movements if you have not been aware of any. The first digit of longitude (1) is understood, so record only the following digits. Each haul must have a position. On nonfishing days, record GMT noon position in these columns.
12. The time system used (on this and all other forms) should be GMT time and dates. Time recorded should be in the 24-hour system.

13. A haul is assigned to a day according to the time the net is begun to be retrieved from the fishing level (nets off bottom time), which is not necessarily the same day the net was set or the day that you sample. Thus, hauls retrieved before 0000 hours are attributed to the previous day, and hauls retrieved on or after 0000 hours are assigned to the next day.
14. When net retrieval is begun, the time is recorded under "nets off bottom". ("Bottom" may refer to the fishing level rather than the actual ocean floor.) "Nets on bottom" refers to the time that the net first reaches the fishing level and the winches stop paying out cable.
15. All 2400-hour notations should be changed to 0000 hours. If this occurs in the "nets off bottom" time, the date should be changed accordingly.
16. Double check haul times to see if they are reasonable times for your vessel. An overlap in haul times for two hauls is an obvious error.
17. If "nets on/off bottom" times are recorded (cols. 34-41), then the fishing duration (cols. 42-45) should not be recorded. Record fishing duration only when you are unable to obtain on/off bottom times, or if the fishing duration is substantially different than what would be obtained by calculation from the on/off bottom times. (This may occur if the net is raised and lowered several times during the haul. If this is the case, *minutes duration* would be more accurate than on/off bottom times, so record only the duration and off bottom time. Note reason at the top of the form.) On/off bottom times are otherwise preferred because they provide us with more detailed information. Make a real effort to either get on/off bottom times or fishing duration.
18. The average fishing depth (cols 46-49) and average bottom depth (cols 51-54) can be recorded in either fathoms (more likely) or meters, depending on the depth recording instruments that the vessel has. Try to obtain both fishing and bottom depths as that will indicate whether the net was fishing on or off the bottom. Make sure you indicate the units (fathoms or meters) for every depth that you record (cols 50 + 55).
19. Record the average trawl speed in columns 56-57.
20. Retained catch: this is the amount of catch (in metric tons, not pounds or short tons--see Table of Equivalents) that is retained aboard the ship. On catcher processors, generally the retained catch is just the round weight of the fish that are actually utilized for products. The retained catch may thus be the ship's estimates of the products (converted to round weight using product recovery figures and from pounds to metric tons).

On vessels that deliver catch to shoreside processing plants, there may be some discard of prohibited species, small fish, and nonutilized species at sea, but the main discard of fish may occur at the processing plant. Your job will be to estimate the amount that is actually discarded by the catcher boat and hence, by subtraction, the

amount that is delivered to the processing plant, not what is eventually retained by the processing plant. If discard is occurring at sea, the best way to determine how much, may be to estimate the amount of utilizable species in the haul using the observer sampling data for the haul or the day, and a rough estimate of amount of the undersized target species that were discarded.

Use your judgement as to how to obtain the most accurate data--this figure should always be filled in for unsampled as well as sampled hauls, and must be recorded to two decimal places. Give a complete description in your report of how these figures were obtained.

21. Official total catch: this will be the official catch weight for the haul, and should be used in all calculations involving haul weight on Forms 3US and radio message worksheets. This should be the best estimate of total catch (all species included), and in most cases it should be based on the ship's estimate of retained catch (round weight), *adjusted for the nonutilized species (using the observer's sample data)*. To adjust hauls for which you do not have sampling data, calculate an adjustment factor for the day (see example below) and multiply the retained catch for that haul times the adjustment factor for that day. If you observed the haul but did not sample it, and feel that the adjustment factor for that day would not give an accurate estimate of the total catch, then use your judgement as to how to obtain the best estimate of total catch. If the vessel officers can provide good estimates of total catch (all species included), then convert these estimates from pounds to metric tons and use them as the official catch weight. This figure must always be filled in (record it to two decimal places). Note at the top of the form the origin of the official total catch estimate. (The first sheet is sufficient unless it changes.) Give a complete description in your report of how these figures were obtained.

sum of adjusted ship's estimates

for the sampled hauls for the day

----- = adjustment factor for the day

sum of the retained catch estimates

for the sampled hauls for the day

adjustment factor x retained catch est. for = adjusted ship est.
for the day a nonsampled haul for that haul

(Example--see 9/10 on example form 2US:

$$\begin{array}{rclcl} 16.00 + 20.00 + 12.00 & 48.00 & & & \\ \hline & = & 1.0390 & 1.0390 \times 7.94 = 8.25 \\ 15.80 + 19.90 + 10.50 & 46.20 & & \text{and} & \\ & & & & 1.0390 \times 17.92 = 18.62 \end{array}$$

22. Observer's estimate: record your estimate of the hauls that you observe. This will usually be a codend or bin-depth estimate. Record it to two decimal places.

23. Enter the 6-digit ADF&G statistical area that the haul retrieval position places each haul in. Refer to the special supplement on the ADF&G statistical areas for your determination of the correct area.
24. Leading zeros should be in the dates (cols 12 & 14) and the times (cols 34-41) only, as needed.
25. Skip a line after each GMT day.
26. Any notes, or comments (other than notes for nonfishing days) should be placed in a part of the form that is not keypunched.

RECORDING SPECIES COMPOSITION (INCLUDING PROHIBITED SPECIES) ON THE NEW FORM 3US

The new Form 3US is to be used instead of the present Form 3(1), Form 3(2), and Form 4. Observers in the domestic trawler fishery are asked to use this new form (and the accompanying 2US, 7US, and 9US forms). It is our hope that the forms will be more flexible in accommodating data from many of the different sampling situations. We also hope that the new forms will be easier for observers, debriefers, keypunchers, and data editors than the present forms used by the foreign fishery observers. Let us know your opinions and suggestions on these forms.

The Form 3US allows observers to whole-haul or partial-whole haul sample for some species, such as sablefish or a rockfish species, while basket sampling for other species. A sample weight is recorded for each species seen. Prohibited species such as Tanner crab, king crab, or salmon are listed separately by species and sex. If large quantities of, for example, Tanner crab are seen, it is still possible to count a large number of the prohibited species group, apply an average weight, and record these as Tanner crab, unid., unknown sex. Refer to the detailed instructions below and the example forms that follow.

1. Enter the identifying information: cruise no., vessel code, date, and haul no. (The cruise number and vessel code will normally be given to you during debriefing.)
2. Remember that the date of the sample should correspond to the information on Form 2US. The date should thus be the day the trawl began to be hauled in.
3. Group the species in your species composition samples by the sample size, starting with the largest sample size first. For example, if you whole-haul sampled for halibut and salmon, partial whole-haul sampled for king and Tanner crab, and basket sampled for the rest of the species, enter the halibut and salmon data first, the crab data next, and the basket sampled species last (as in Form 3 example 3).
4. List each species by the specific common name and the corresponding species code found in the list of alphabetically arranged species in your manual. Look up a species under its group name--rockfish, sculpin, sole, etc. Most fish, especially the commercially important species, should be identified to species, if possible. Try not to use categories such as "flatfish unidentified" and "rockfish unidentified." If you have been unable to identify, for example, two species of rockfish, keep the data for the two species separate by labeling them "rockfish A" and "rockfish B." If you are later able to determine their identity, then it would be possible to substitute the species name and code. On the other hand, for non-commercially important species (sculpins, eelpouts, pricklybacks, rattails, etc.), a designation such as "sculpin, unident." is fine. If you label them "sculpin A" and "sculpin B" and do not get a positive identification on them later, then you must group them all under "sculpin unident".

5. All Tanner crab, king crab, or salmon should be listed separately by species and sex whenever possible. For these species only, record an "M", "F", or "U" in column 1. If large quantities of one of these species groups are seen, it is permissible to take random subsamples of the species group and record all of the individuals in the subsample by species and sex. Either count or weigh all of the remaining members of the species group and apply an average weight (from your subsample totals) to get the weight or number, and record these as (Tanner crab/king crab/salmon) unid. and unknown sex. Make sure that no individual is recorded twice on the forms (none of the subsample should be reported in the larger group of unidentified individuals). (See 3US example 1, Tanner crab for an illustration of how to record the data in this type of a subsample situation.)
6. In column 23, indicate the sampling type for each sample size. For species that you whole-haul sampled, use "W"; for species that you partial whole-haul sampled, use "P"; for species that you basket-sampled for, use "B"; and for species that you sampled using any other type of sampling, use "O".
7. Skip a line between species with different sample weights (see example 3).
8. The number of individuals and weight of each species group are then placed in the appropriate columns. Every number you enter must have a weight and every weight must have a number. All weights should have a well-defined decimal point as the decimal point itself will be keypunched and must be present even if the weights are not carried to a tenth or a hundredth of a kilogram (see the examples of Form 3US). Enter a trailing zero after the decimal point if you do not carry the weights to a tenth or a hundredth of a kilogram. Do not enter any weight to more than two decimal places. If something weighs much less than .01 kg, ignore it.
9. Enter the weight sampled for each species in columns 41-51, using a well-defined decimal point. If you whole-haul sampled for the species, the sample weight should be the same as the official total catch estimate (cols. 63-67 on the Form 2US). If you partial-haul sampled, the sample weight is a fraction of the official total catch estimate or the sample weight you calculated using difference in bin depth or other means. If you basket sampled, the sample weight should be the sum of the weights of the individual species that were basket sampled (marked with a "B" in column 23). The sample weight can equal but must never be greater than the official total catch.

Please note: if an observer is whole-haul or partial whole-haul sampling for some species, the observer should not include the weight of any of these in the basket sample weight if some are found in the basket samples. These of course should be entered with any others as a part of the whole or partial whole-haul sample.

10. A worksheet is included as part of the form. The observer should record there any raw data that might otherwise be lost because an extrapolated figure is entered on the keypunched portion of the form. The following are examples of the use of the worksheet:

- a) When whole-haul sampling, the observer should enter here the results of basket sampling for the average weight of the target species (see Form 3US examples 1 and 2).
- b) If the observer counted more individuals of a species than he was able to weigh, he should enter the actual weight of the individuals he was able to weigh, use this space to calculate the average weight, and enter the total extrapolated weight for all observed on the keypunch form (see how the halibut and salmon were handled on Form 3US example 3).
- c) Similar entries should be made for the reverse situation (to item b above) when you, for example, weigh large quantities of small Tanner crab, and must extrapolate a total number.
- d) Individuals whose weight is estimated can be entered on the worksheet as in example 3--enter the numbers and weights of the ones that were actually weighed and apply the average weight to the nonweighed individuals. If you feel the nonweighed individual is of a different size than those that were weighed, enter an estimate on the "wt of above" line just below the number estimated. Include the total number observed and the combined weight of the actual and estimated individuals on the keypunched form below.

Note in the comments section the number of basket samples that were taken, the type of sampling you used, and anything unusual about the catch or sampling.

- 11. It is necessary to have some indication of how much catch was monitored for each of the prohibited species groups --halibut, king crab, Tanner crab, salmon/steelhead. The observer should check to see whether or not each of the prohibited species groups was represented on the form. If no individuals of that species group were observed, then the observer should enter that group name, species code (use codes 2, 3, 101, 220), sample type, sample weight, 0 for the number, and 0.0 for the weight. (See the 3US examples 1, 2, and 3.)
- 12. Under the heading "Viability", record the number of halibut and crab judged to be in each category. For the definition of "excellent", "poor", and "dead" conditions, please refer to the table in the section "Biological Data Collected from Prohibited Species." The sum of the numbers recorded in those three categories should be the total number of halibut or crab examined for viability but it doesn't have to match the numbers weighed (on the same line to the left of the viability).

*If the observer wishes to record viability of prohibited species from a haul that was not sampled, the observer should use a separate sheet and record the identifying information including haul number, the species name, sex, species code, and viability data. A "V" (for viability only) should be recorded as the sample type in column 23.

13. To complete the keypunch check (line 999 at the top of each form), add all of the figures in the number column and enter the sum on line 999, columns 24-29. Add the weights and enter on line 999, columns 30-40. Enter the official haul weight in columns 41-51 of line 999. (Previous observers have found it useful to have this information present on this form for ease in filling out the 3US and radio report worksheet forms.) Add the numbers in each viability category and enter in columns 52-60 of line 999.
14. In the boxes just above the column heading labelled "Viability", check the sampling method for each of the prohibited species groups. This will enable the debriefers/data editors to see quickly what your sampling methods were and will serve as a check if you forget to enter 0 data for nonobserved prohibited species groups.

FORM 7US INSTRUCTIONS

Refer to the regular sampling manual for directions in filling out Form 7US. The only difference between the 7US form and the regular Form 7 is the accommodation for the 5 digit cruise number and the keypunch check (columns 23-27. The keypunch check column replaces the "no. of individ. in row" and "sum of lengths in row". Simply add all of the numbers in the row (size group and frequencies together) and put the sum in the keypunch check column (see example Form 7US).

FORM 9US INSTRUCTIONS

Form 9 is used for recording biological information concerning individual fish or invertebrates. It will most often be used in recording the sex, length, and weight of fish whose age structures (scales, otoliths, or fin rays) are collected for future age determination. It will be used for collecting data to accompany scales of salmon caught incidentally as well as age structure collections of primary or secondary target species which you may have been specifically instructed to collect.

1. Form 9US data sheets are filed separately by species and cruise. To make sure that you don't record coho salmon on the reverse side of a chinook salmon sheet for instance, keep separate groups of pages for each species. Start with page 1 for each new species.
2. At the top of the form, write the number of the three-digit subarea corresponding to the catches on the sheet. Check the subarea you recorded for the haul/set on either 1US or 2US. If the vessel changes subareas during the day, you will need to use a different sheet to record data from the new subarea. (You may use the back of the previous form.)
3. Fill in the cruise number and vessel code (when known), date, species common name, and the species code corresponding to the common name. Start each day's measurements (or subarea if it changes during the day) on a new side.
4. Leading zeros should appear in the month and day only (columns 12 and 14 only, as needed).

5. Record the specimen type that is being collected:

- 1--otoliths
- 2--scales
- 3--fin rays
- 4--otoliths and scales
- 5--otoliths and fin rays
- 6--scales and fin rays
- 7--otoliths, scales, and fin rays

6. Record the sampling system that was used: (you will be told which sampling system to use before you go out)

1--stratified random--This is the most common system for collecting age structures in this program. Usually the fish are obtained from your length frequency samples and a tally sheet is used to ensure that age structures are obtained from no more than 5 fish per cm sex group.

2--random--In this system, although the fish may be from your length frequency sample, no stratification is made by size and sex. Instead, you may be instructed to take age structures from every eighth, tenth, fifteenth (or other) fish to ensure that the fish selected are a random collection from the population at large. Salmon scale samples are an example of this because scale samples are taken from all of the salmon or a random subsample of all of the salmon.

3--systematic--Fish are chosen from the length frequency sample in a random fashion (as in 2 above), but the haul/set to be sampled is selected in a "systematic" fashion. For example, the haul closest to the cumulative 200, 400, 600 metric ton catch may be chosen to be sampled.

7. Ignore "Total no. of specimens" and "Catalogue date," as this information will be filled in by others after you return.

8. On trawlers record the haul number in columns 25-27; on longline or pot vessels record the set number in those columns.

9. Note that data from several hauls/sets can be recorded per sheet as long as the hauls were begun to be retrieved or the set retrieval was completed on the date written on the top of the page and they were all taken from hauls/sets in the same area. Go to a new side only when all 37 lines are filled, when you are starting a new GMT day, or a haul/set is in a different subarea.

10. The specimen number is the identifying number on the otolith vial, scale envelope, or other container with the specimen. There should not be any duplicate specimen numbers within a species. The specimen numbers should be listed in sequential number, which should be the case if the sampling directions were followed. (We

want to avoid having specimen containers filled at random.) Salmon scale samples are numbered sequentially by species and are recorded on separate groups of pages.

11. If you board another ship during the same trip, you can continue with the same sequence of otolith numbers (or other specimen numbers), but keep the Form 9US's separate for the two different cruises.
12. It is best if the specimens are removed by sex group and recorded separately by sex on the form.
13. Record the sex of the fish using "M", "F", and "U" notation; not O and O. (M = male; F = female; U = unidentified)
14. Record the length of the fish to the nearest cm--no decimal places.
15. The weight is to be filled out to two decimal places.
16. If you recorded the length of the fish on the Form 7US forms (which should almost always be the case unless you picked this particular fish from someplace other than your length frequency sample), record a "Y" for "Yes" in column 41.
17. If you are requested to record maturity stage, record this in columns 42-43. Use the appropriate maturity scale for this species.
18. The columns to the right of maturity stage (columns 44 and above) are for the age readers to complete. If your project specifically directs you to write something, or if you note something extraordinary about the individual fish that you think people should be made aware of, write your comments small enough to allow the age readers to also record remarks, if necessary.
19. If for some reason, some preservative other than ethyl alcohol was used (such as rubbing alcohol), note the preservative at the top of the first page of each set of Form 9US's.
20. As with other forms, you will be recording your name and the ship name at the top of each set of forms. For the Form 9US this means that you should do this at the top of the first sheet for each species.

Radio Report Worksheets

The new Form 3US requires, in some cases, a more complicated procedure for the calculation of the radio messages, due to the potential for having different sample sizes for different species in the same haul. The example Form RM shows the proper way to enter the data obtained from the Form 3US examples 1, 2, and 3. If you whole-haul sampled all of the species in the haul, the data are entered and the calculations made in the same manner as is instructed in the manual (see the example RM form for hauls 101 and 103).

If you have different sample sizes for the same haul as in haul 104, enter the data on separate lines, the largest sample size first. In extrapolating the partial whole-haul sample, the observer should analyze the sampling method, and decide whether the removal of the species that were whole-haul sampled affected the sample size of the partial whole-haul sample. If the observer removed both the whole-haul sampled species and the partial whole-hauled sampling species at the same time, and their removal did not affect the determination of the fraction of the haul that was sampled, then the sample is extrapolated to the weight of the whole haul, as in the entry of haul 104 pwh. If the removal of the whole-haul sampled species did affect the determination of the fraction of the haul that was sampled, then the weight of those species should be subtracted from the haul weight in column A before the extrapolation to calculate the column D figures. The entry of the basket sample data for haul 104 bask illustrates this principle. In basket sampling, the observer is actually sampling only the species that remain. (If any of the whole or partial whole-hauled species appear in the basket samples, the observer was instructed to subtract the weight of these from the basket sample weight and include these elsewhere.) The basket sample species composition should not be expanded to the entire haul weight but to the haul weight minus the extrapolated weight of the species that were partial or whole-haul sampled. (In the example, $12 \text{ mt} - (.093 + .084) = 11.823 \text{ mt.}$)

Form RM-1 is calculated and summed as one normally does for the foreign fishery data forms. Use the same Bering Sea and Gulf of Alaska subareas for reporting the catch.

Form RM-3 is also calculated and summed as usual with one minor exception: if you observed a large number of a prohibited species group (such as the Tanner crab in Form 3US example 1) and took a subsample of that number to weigh by species and sex, you will need to apply the proportions of species observed to the total number of individuals observed. These calculations are shown by the asterisks in the RM-3 example to the right of the area.

Radio messages are sent in the same standard format, but omit PARA 3 (Marine mammal data). Indicate "ALL DOMESTIC CATCH", and don't forget the ORC nos.

FORMAT FOR DOMESTIC RADIO MESSAGES

If your vessel cruise lasts more than one week, you should prepare a catch message similar to that required by the foreign fishery observer program, and you should request that it be sent to NMFS in Seattle by telex or rapidfax. (See the letter of introduction for the different possibilities for transmission.)

The following sample radio message is from a U.S. catcher/processor that fished in Bering Sea subareas 513 and 511:

RAPIDFAX NO. OR TELEX NO.
TO: JANET WALL/ NWAFC/ SEATTLE WA
FROM: JANE OBSERVER/ SEA GULL/ ORC 107P8

PARA 1/ AK-87-0001/ OCT 10/ US DOM/ OCT 4-6/ A513 DG3DOP3/ SQU 0D62P8/ TURB 5D34P12/ OFLAT 1D20P3/ POLL 83D37P21/ COD 18D21P12/ OTH OD68P14/ NON 0D58P13/ TOTAL 110P2///

TGT OTH

PARA 2/ US DOM/ OCT 4-6/ A513/ HW 85D0P13/ BLUKNG 29D0P11/ OTHKNG 4D0P4/ BTAN 81D0P9/ CHIN 12D0P3///

PARA 1/ AK-87-0001/ OCT 10/ US DOM/ OCT 7-10/ A511 DG4D0P4/ YELL 109D75P22/ ROSE TURB 8D24P14/ OFLAT 72D34P16/ POLL 6D58P19/ COD 24D52P13/ OTH 0D29P11/ NON 13D28P14/ TOTAL 235P10///

TGT YELL

PARA 2/ US DOM/ OCT 7-10/ A511/ HW 125D0P8/ REDKNG 3720D3P15/ BTAN 111D7P10/ OTHTAN 33D9P15/ HBT NOS 91D0P10 WT 360D55P19///

IDS OCT 4/ STOP.

If you are on a vessel that makes trips of less than a week duration, phone in your catch message after you have returned to port. Fill out the RM-2 and RM-4 forms using the instructions given (use D in the first column, use UA for the agency code (UW for University of Washington observers) in cols 71-72, and leave "TGT" and "Company code" columns blank. Please record nonallocated species on the RM-2 form as "NON" and also include the "TOTAL" for each area/week. Use these forms to read the data over the phone.

Let me know your first (GMT) day of sampling.

I will need to obtain a copy of the fish ticket(s) for the vessel you just got off. When you give me the catch information, or check in with me after your cruise, please give me the name of the vessel, the date the catch was delivered, and the port it was delivered to. I will then be able to request the proper fish ticket from ADF&G.

TELEPHONE, RAPIDFAX, TELEX NUMBERS, ETC.

Northwest and Alaska Fisheries Center (for sending or phoning catchmessages; for between-trip debriefing) :

Telex: 329422 callback=NWASC-SEA

(backup telex in Bldg.#1 at NWAFC = 9104442786)

Rapidfax: (206) 526-4004

Phones: (will accept collect calls)

Janet Wall (206) 526-4195

Russ Nelson (206) 526-4194

Janet Wall (home phone) (206) 283-1690

recorder phone (to leave catch messages or non-urgent messages on weekends, nights) You can leave up to a 5-minute message (won't accept collect calls)
(206) 526-4205

Nancy Monroe ^{office} (907) 276-3241

Address: Janet Wall
Northwest and Alaska Fisheries Center
7600 Sand Point Way NE
BIN C15700, Bldg. 4
Seattle, WA 98115-0070

Alaska Regional Office

Telex: 45377 callback = NMFS AKR JNU

Rapidfax: (907) 586-7131

Phone: (907) 586-7229 (Janet Smoker/Jessie Gharrett)

Address: Janet Smoker
National Marine Fisheries Service, FAK
P.O. Box 1668
Juneau, AK 99801

National Marine Fisheries Service, Kodiak Laboratory

(to store, or obtain access to stored gear)

Phone: (907) 487-4961 (-4962)

Address: P.O. Box 1638, Kodiak, AK 99615 (on Coast Guard base)

Alaska Department of Fish & Game (ADF&G)

ADF&G in Kodiak

phone: (907) 486-4791 (Leslie Watson, Peter Craig)

address: 211 Mission Road, Kodiak AK 99615

ADF&G in Dutch Harbor (to obtain extra supplies from Foreign Fishery Observer Program supplies)

Ken Griffin (907) 581-1239

Carolyn Griffin (907) 581-1529

TABLE OF EQUIVALENTS

1 inch = 2.540 centimeters	1 centimeter = .3937 inches
1 foot = .3048 meters	1 meter = 3.2808 feet
1 foot = .1667 fathoms	
1 fathom = 6 feet = 1.829 meters	1 meter = 100 cm = 0.5468 fathoms
1 statute mile = 5280 feet = 1.609 kilometers = 0.86899 nautical miles = 880 fathoms	
1 nautical mile = 1.15078 statute miles = 1 minute of latitude = 1.852 kilometers = 1012.6859 fathoms = 1852 meters	
1 fathom = 0.0009875 nautical miles = 0.0011364 statute miles	
1 pound = 0.4536 kg	1 kg = 2.2046 lb.
total catch wt. in lbs ÷ 2.205 = total catch wt. in kilograms	
1 metric ton = 1000 kg = 2204.6 lbs = 0.9842 long tons = 1.1023 short tons	
1 short ton = 907.1847 kg = 2000 lbs = 0.8929 long tons = 0.9072 metric tons	
1 long ton (British) = 1016.0469 kg = 2240 lbs = 1.1060 metric tons = 1.12 short tons	

TABLE FOR CONVERTING POUNDS TO METRIC TONS

LBS	MT	LBS	MT
1000	0.4536	14000	6.3503
2000	0.9072	15000	6.8039
3000	1.3608	16000	7.2575
4000	1.8144	17000	7.7111
5000	2.2680	18000	8.1647
6000	2.7216	19000	8.6183
7000	3.1751	20000	9.0718
8000	3.6287	21000	9.5254
9000	4.0823	22000	9.9790
10000	4.5359	23000	10.4326
11000	4.9895	24000	10.8862
12000	5.4431	25000	11.3398
13000	5.8967	26000	11.7934

Form 12 a- Vessel Data Form

Vessel Name _____

Permit Number _____ Vessel Type _____

Length _____ Width _____ Draft _____

Gross Tonnage _____ Net Tonnage _____

Engine Type _____ Horsepower _____

Hull Number _____ Registration Number _____

Year Commissioned _____ Radio Call Sign _____

Company _____

Home Port _____

Personnel : Captain _____

Fishing Master _____

Factory Manager _____

No. Officers _____ No. Fishing Crew _____ No. Processing _____

Total Ship Complement _____

UNITED STATES FISHERIES OBSERVER

NAME

HOME CITY AND STATE

CITIZENSHIP

MARITAL STATUS

EDUCATION

CUSTOMARY OCCUPATION

PROFESSIONAL EXPERIENCE

AGREEMENT TO SHARE OBSERVER DATA WITH ADF&G

National Marine Fisheries Service (NMFS) and the Alaska Department of Fish and Game (ADF&G) both have programs in which fishery observers collect data aboard domestic fishing vessels in Alaska. As both organizations see the value for fisheries management of having as complete a data base as possible, the two organizations have agreed to send observer data that they collect to the other organization whenever the skipper approves of the transfer. Both NMFS and ADF&G have agreed to abide by the rules of confidentiality in handling the data. For your information, ADF&G uses the following standards of confidentiality:

1. No vessels will be referred to by name in written reports unless specific permission is obtained from the vessel skipper and/or owners.
2. Observer results involving the fishing of three or less vessels and/or processing companies will not be discussed in reports in a manner which isolates the landed catch of individual target species nor the precise locations where fishing occurred. Catch areas will be reported in general terms only.
3. Catch rates of prohibited or non-commercial species may be reported for less than three vessels fishing for less than three processing companies, but in these cases catch rates of these species would be reported only in terms whereby individual target species catch could not be determined.
4. Observer results for three or more vessels fishing for three or more processing companies may be reported in terms whereby combined target species catches may be determined (i.e. number or weight of prohibited species catch per metric ton of target species landed.)

In view of the above, the undersigned captain does _____ or does not _____ agree to voluntarily release any data obtained from this trip to the Alaska Department of Fish and Game observer program.

Signature: _____

Date: _____

Vessel name: _____

HAVING TROUBLE IDENTIFYING A ROCKFISH ?

(If so, follow the directions below!)

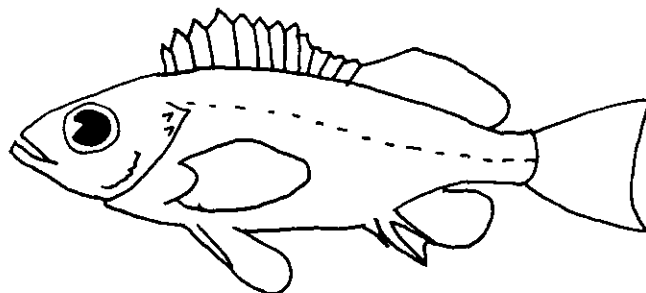
This form serves several functions. First, it may actually help you identify the fish you have, by directing you to answer questions that will guide you to the characters most useful in identifying it. Secondly, if you still can not identify the fish this way, it will provide your debriefer with a wealth of information, perhaps enough for an identification.

Are you sure it is a Rockfish? yes no probably

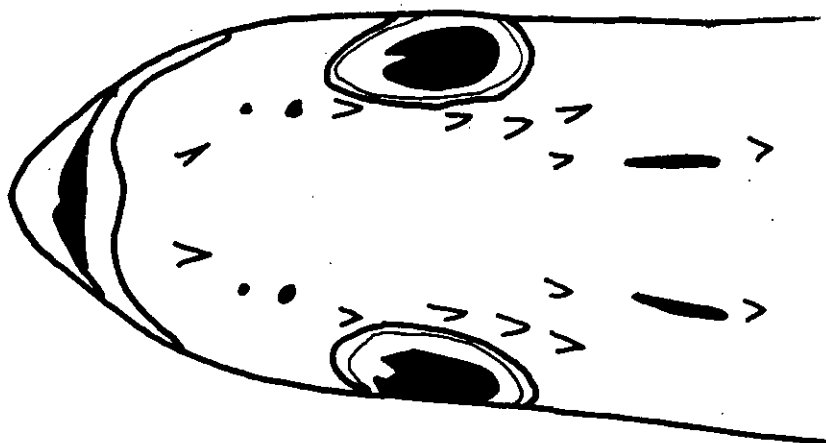
Remember that Sebastolobus is not in Hitz "Field Identification of the Northeastern Pacific Rockfish (Sebastodes)". Check the rockfish section of the species id to make sure it is a Sebastes.

What color category of Hitz's would you place it in?

Please fill in the color and any pattern, stripes, freckles, bars, light areas etc. Sympheseal Knob? Study your specimen closely.



Please indicate which pair of head spines your specimen has on the diagram below. Remember that all members of a species do not have exactly the same spine distribution that is depicted in Hitz.



Which rockfish species are you confused between?

What characters would help distinguish between these species?
Use all your books, Hart, Hitz, Eschmeyer and the Species ID
manual, when answering this question.

Which of these characters does the fish you have exhibit?

Which of those fish do you think this specimen most likely is?

Why are you not sure?

Which fish in Eschmeyer looks the most like your fish?

Plate number: _____ Common name: _____

Scientific name: _____

Please fill in the following meristic characters.

Dorsal fin spines:

Dorsal fin rays:

Anal fin spines:

Anal fin rays:

Pectoral fin rays:

Pelvic fin spines:

Pelvic fin rays:

Gill rakers--upper arm:

Gill rakers--lower arm:

Freeze the fish and bring it back, if you can't do that then take
a picture of it.

DOMESTIC OBSERVER REPORTS

All cruise reports should contain the itinerary sheet, 2nd page of report, map, and gear diagram (when possible). If your ship is a mothership, fill out a catcher boat list. If possible, make factory and/or weather deck diagrams indicating your sampling and working areas, flow of fish, and other items of interest.

Additional questions to answer in the report: (answer as completely as possible)

- 1) How was the "official total catch" obtained ? If the ship's estimates were adjusted, how were the adjustments made ?
- 2) How was the observer estimate obtained ?
- 3) How was the retained catch obtained ?
- 4) If the official total catch was not the ship's estimate, did they make an estimate ? If so, why did you decide another estimate was more accurate ?
- 5) List the species groups, size groups that were retained and the species/size groups that were discarded. If this varied from haul to haul, indicate the basis for the variation.
- 6) How was the species composition sampling (including prohibited species sampling) accomplished ? Was it difficult to avoid interfering with shipboard procedures ? Include, if possible, a diagram of where you sampled and what you had to do to obtain, hold, gather data, and discard the fish/invertebrates. If you had to forego gathering certain data, indicate what and why. Discuss how lengths, otoliths, or special project data were obtained (or not obtained).
- 7) Did you see any molting or premolt crabs ? If so, briefly summarize your data.
- 8) Summarize any marine mammal observations or incidental catch of marine mammals.
- 9) Report on the fishing strategy employed, any innovative net design, navigational equipment, or processing machinery.
- 10) Recount any unusual occurrence such as an accident or injury at sea. Was there anything which made you feel this was an unsafe vessel ? Is there anything regarding safety that the next observer should be made aware of ?
- 11) Describe anything unusual regarding the catches.
- 12) Did your ship ever fish (or receive catches) from inside state waters) ? If so, give the approximate percentage of the catch was taken inside state waters ?

- 13) What did you do, if anything specific, to help build good working relationships with the captain/crew ? How were you treated ? What were your quarters like ?
Indicate the numbers, ship status and sex of those that you shared your quarters with. Where did you do your paperwork ? Were there any women in the crew ?
- 14) Report anything you feel the next observer or NMFS should know about this vessel. Were there any noteworthy comments or opinions (regarding the fishery, observers, NMFS, ADF&G, etc.) given by the captain/crew that you feel we should know ?

Please fill in the following with information on ship conditions:

Target species _____

Approximate haul size _____

Observer's room was: private _____; semiprivate _____; shared with 2 or more others _____

Was bedding available? yes _____; no, observer should bring _____

Ship's bath: private _____ or shared _____

Bath availability: daily _____ or other (describe) _____

Laundry: by hand _____; by machine _____; by ship's steward _____

Drinking water: good _____; poor _____; requires boiling _____

General cleanliness: clean _____; adequate _____; not clean _____

Presence of cockroaches? _____ Presence of rats or mice? _____

Electrical supply: voltage _____ Adapter needed? (describe) _____

Video player? _____ VHS? _____ BETAMAX? _____ SUPER8? _____ Videocamera? _____

Typical meals: Breakfast _____

Lunch _____

Dinner _____

Other _____

Was the quantity and quality of the food sufficient ? If not, please explain.

6/89

FORM 12 - VESSEL DATA FORM

Vessel Name _____

Permit Number _____ Vessel Type _____

Length _____ Width _____ Draft _____

Gross Tonnage _____ Net Tonnage _____

Engine Type _____ Horsepower _____

Year Commissioned _____ Radio Call Sign _____

Company _____

Home Port _____

Personnel: Captain _____

Fishing Master _____

Factory Manager _____

Number of Officers _____

Total Ship Complement _____

ROCKFISH SPECIES DESCRIPTION FORM

Species Name: _____

Date of Capture: _____

Haul or Delivery Number: _____

Position of Capture (Lat. & Long.): _____

Depth of Capture: _____

Length: _____

Weight: _____

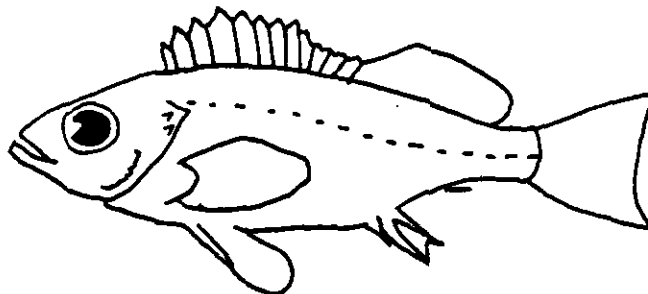
Was an example of this species brought back? Yes No

(Note: If this fish represents a range or depth extension or a record in size, bring it back for species verification.)

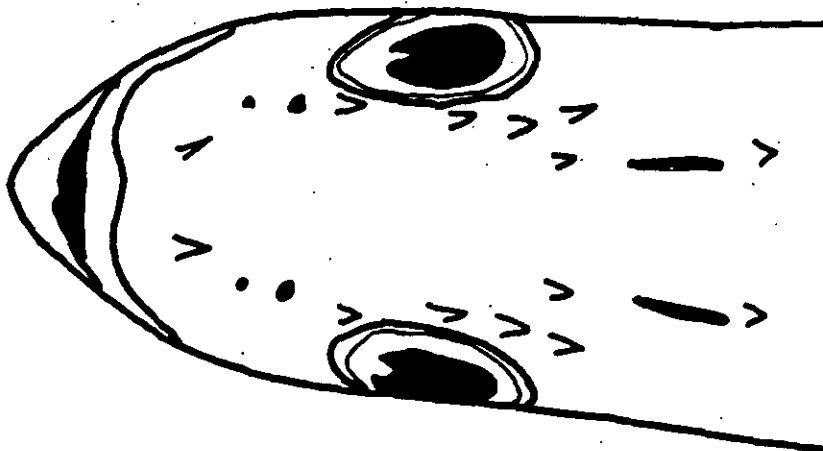
(Remember that Sebastolobus is not in Hitz "Field Identification of the Northeastern Pacific Rockfish (Sebastodes)". Check the rockfish section of the "Species Identification Manual" to make sure it is a Sebastes.)

What color category of Hitz's would you place it in?

Please sketch any pattern, stripes, freckles, bars, light or dark areas etc. Draw the shape of the anal fin and include any sympheseal knob. Study your specimen closely.



Please indicate which pair of head spines your specimen has on the diagram below. Remember that all members of a species do not have exactly the same spine distribution that is depicted in Hitz. Also, remember that some spines are very difficult to find.



Which fish in Eschmeyer looks the most like your fish?

Plate number: _____ Common name: _____

Scientific name: _____

Examine the fish and record the following meristic characters:
(Note: There is often a fair amount of variability in a fish,
even between counts on different sides of the same fish.
Therefore, counts on both sides might help.)

Dorsal fin spines: _____

Dorsal fin rays: _____

Anal fin rays: _____

Pectoral fin rays: _____

Pelvic fin spines: _____

Pelvic fin rays: _____

Gill rakers--upper arm: _____

Gill rakers--lower arm: _____

Peritoneum Color: _____

Are the second anal fin spine and third anal fin spine equal in
length? Yes No

If not, which is larger? Second spine Third spine

(Note: If you are not absolutely sure of your identification,
bring a specimen back or at least take a photograph of it.)

Comments and Additional Notes:

FLATFISH SPECIES DESCRIPTION FORM

Species Name: _____
Date of Capture: _____
Haul or Delivery Number: _____
Position of Capture (Lat. & Long.): _____
Depth of Capture: _____
Length: _____
Weight: _____

Was an example of this species brought back? Yes No
(Note: If this fish represents a range or depth extension, or a record in size, bring it back for species verification.)

First, please review the abbreviations at the bottom of the "Field Key to Flatfishes", p.31 in your Species Identification Manual. Often one of these abbreviations is misinterpreted and will create errors in identification. Terms such as ADB, and MAX have often caused confusion. Please also check the illustrations that precede the key to make sure you are taking measurements in the same way that the key asks you to.

Is the flatfish right eyed or left eyed? _____

Note: Right-eyed fish belong to the family Pleuronectidae and left-eyed fish belong the family Bothidae. However, remember that not all Pleuronectidae have their eyes on the right side, unusual individuals may have their eyes on the left.

Which fish of those listed in the illustrations on p.32-33 of the Species Identification Manual looks most like it?

Please answer the following questions:

What is the general tail shape?



Does the fish have an accessory dorsal branch (ADB) of the lateral line?

_____ Yes (If so, remember to sketch it in.)
_____ No

Does the eye protrude over the profile of the head such that its' edge can be seen from the blind side?

_____ Yes _____ No

Relative to the lower eye, the maxillary ends:

- _____ forward of orbit
- _____ below anterior part of orbit
- _____ below pupil of eye
- _____ below posterior part of orbit
- _____ below posterior margin of orbit or beyond

In regard to mouth symmetry; the maxillary is:

- ☐ same length on eyed and blind sides
- ☐ slightly asymmetrical
- ☐ dramatically asymmetrical

What is the preoperculum shape?

- ☐ rounded
- ☐ angled

What is the shape of the lateral line over the pectoral fin?

- ☐ flat
- ☐ curved
- ☐ arched
- ☐ highly arched

What is the shape of the posterior margin of the pectoral fin (on the eyed side)?

- ☐ rounded
- ☐ angular
- ☐ pointed or extended (i.e. upper rays longer than lower rays)

Please make the following counts:

Dorsal fin rays: _____

Anal fin rays: _____

pectoral fin rays: _____

pelvic fin rays: _____

Gill rakers on the 1st arch:

upper arm: _____

lower arm: _____

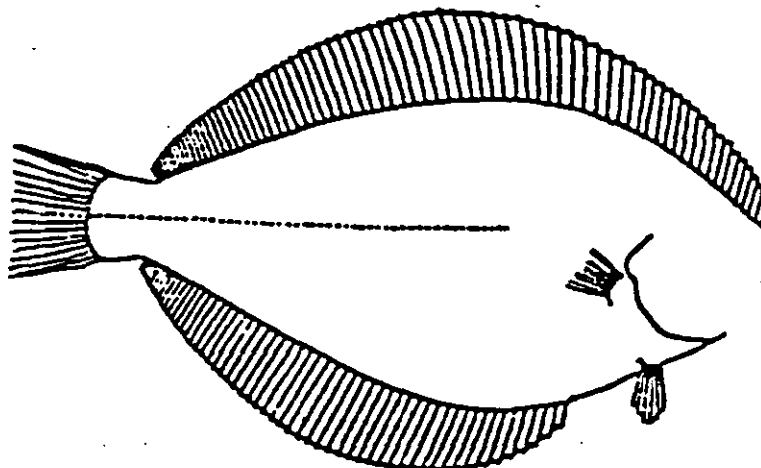
total: _____

Gill rakers on the 2nd arch:

upper arm: _____

Finish the sketch below as best you can. Make sure to draw in the important features of the flatfish. Include the following in your drawing:

- general head shape
- size and shape of mouth
- placement of eyes
- lateral line (include any arch and ADB)
- shape of preoperculum
- size and shape of pectoral fin
- shape of the end of the tail



MISC. SPECIES DESCRIPTION FORM

Species Name: _____

Date of Capture: _____

Haul or Delivery Number: _____

Position of Capture (Lat. & Long.): _____

Depth of Capture: _____

Length: _____

Weight: _____

Was an example of this species brought back? Yes No

(Note: If this animal represents a range or depth extension or a record in size, bring it back for species verification.)

This form is to be filled out for the first sighting of all species of fish (except rockfish and flatfish which have their own description forms) and invertebrates. Animals that are only keyed out to family groups, such as sculpin unidentified, poacher unidentified, or jellyfish unidentified need not be described. For fish, include counts of all fin rays, standard body measurements, (fork length, head length, snout length, and caudal peduncle length) and any other pertinent measurements.

List below, the features that led you to your genus or species conclusion. Be detailed in your description and make a sketch showing the main features.

TAGGED FISH INFORMATION

Cruise No. _____ Vessel Code _____ Observer _____

Ship Name:

Permit Number:

Captain's Name:

Owner's Name:

Owner's Address:

Vessel Type:

Tag serial number:

Species:

Length (fork length in mm):

Weight (total wt. in gm):

Sex and Maturity of gonads (immature, mature, spawning):

Time and Date of capture:

Location of capture (latitude - longitude):

Depth of capture:

General appearance (poor body condition, good body condition):

Condition of tagging wound (healthy healed tissue, open wound):

Other Comments:



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest and Alaska Fisheries Center
Resource Assessment and Conservation
Engineering Division
7600 Sand Point Way Northeast
BIN C15700, Building 4
Seattle, Washington 98115-0070

February 5, 1987

F/NWC1:FS1.17

MEMORANDUM TO: Finders of Tagged Sablefish (Blackcod)
FROM: F/NWC1 - *Frank Shaw* Frank Shaw, Fishery Biologist
SUBJECT: Sablefish Tag Rewards

The U.S. National Marine Fisheries Service (NMFS), Seattle Washington, is tagging sablefish off the coast of Alaska, Washington, Oregon and California in order to determine distribution, migration and growth.

Sablefish are tagged with an anchor tag (yellow, orange, or blue) just below the first dorsal fin (as shown below).

A cash reward is available to those returning tags and recovery information to NMFS. Reward amounts are determined as follows:

1. \$5.00 for each sablefish tag returned accompanied by information:

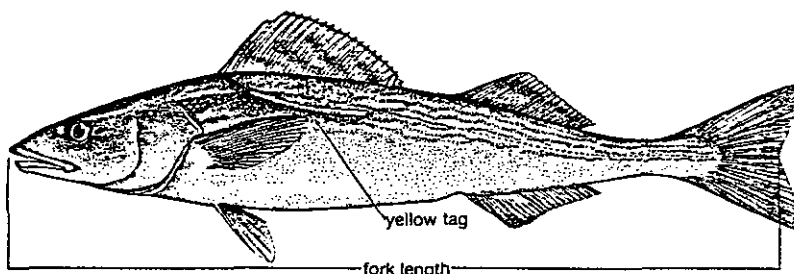
- recovery date
- recovery location (lat./long. or loran rates)
- fish fork length (see below)

2. \$2.00 for sablefish tags without the above recovery information.

Other information that would be greatly appreciated is the fishing gear type and fishing depth, and the fish's sex and weight.

The reward and release information will be sent promptly for each tag received. Please send tags and information to:

Northwest and Alaska Fisheries Center
7600 Sand Point Way N.E.
Building 4; Bin C15700
Seattle, WA 98115



FORMAT FOR DOMESTIC RADIO MESSAGES

If you are at sea for more than one week, prepare a catch message for transmission from the vessel and request that it be sent to NMFS in Seattle by telex or rapidfax. (See the letter of introduction for the different possibilities for transmission.) When preparing a message for fax transmission, use only plain, not lined, paper and write your message in larger than normal, block, dark lettering. If your messages are not being sent or are not getting through to our office, ask whether they are getting communications through to their company office. If they can send messages to their office, have your weekly message sent there with a note to the addressee such as, "Unable to transmit message to NMFS directly. Please forward this message to: Janet Wall/ AKC/ Seattle WA/ Telex 329422 (Callback NWASC SEA)/ Fax (206)526-4004/ Phone (206)526-4195."

If your vessel is unable to transmit any messages, or you are aboard a vessel for a week or less, (as is commonly the case in shoreside delivery vessels), or you have just gotten off a vessel and have the last few day's data to send in, phone in your catch message after you have returned to port. Instead of formatting a catch message as you do for transmission, fill out the RM-2 and RM-4 forms using the instructions given on the following pages. Call our logistics staff person and read the RM-2 and RM-4 information to them over the phone. Weekly radio messages are critical. Please remember, the data must be divided into report weeks which run from Sunday through Saturday, GMT time and date.

Also, NMFS will need to obtain copies of fish ticket(s) for your vessels. When phoning in catch information, or checking in after your cruise, please give the name of the vessel, the date(s) of catch deliveries, and the port catch was delivered to. With this information we will be able to request the proper fish ticket information from ADF&G.

On formatting for transmission, please notice the paragraph 3 containing effort and marine mammal information by subarea. For any take of marine mammals, designate the species with the species codes given in the instructions for Form 10US. As usual, we will need to know your first GMT day of sampling. The following sample radio message is from a U.S. catcher/processor that fished in Bering Sea subareas 513 and 511:

RAPIDFAX NO. OR TELEX NO.
TO: JANET WALL/ AKC/ SEATTLE WA
FROM: JANE OBSERVER/ SEA GULL/ ORC 107P8

PARA 1/ AK-87-0001/ OCT 10/ US DOM/ OCT 4-6/ A513/ DG3DOP3/ SQU 0D62P8/ TURB 5D34P12/ OFLAT 1D20P3/ POLL 83D37P21/ COD 18D21P12/ OTH 0D68P14/ NON 0D58P13/ TOTAL 110D00P2/// OCT 7-10/ A511/ DG4DOP4/ YELL 109D75P22/ TURB 8D24P14/ OFLAT 72D34P16/ POLL 6D58P19/ COD 24D52P13/ OTH 0D29P11/ NON 13D28P14/ TOTAL 235D00P10///

PARA 2/ US DOM/ OCT 4-6/ A513/ HW 85D0P13/ BLUKNG 29D0P11/ OTHKNG 4D0P4/ BTAN 81D0P9/ CHIN 12D0P3/// OCT 7-10/ A511/ HW 125D0P8/ REDKNG 3720D3P15/ BTAN 111D7P10/ OTHTAN 33D9P15/ HBT NOS 91D0P10 WT 360D55P19

PARA 3/ A513/ TOWS LANDED 20P2/ TOTAL DURATION 2520P9 MIN/ MMTOWS SAMPLED 20P2/ CU 1P1/// A511/ TOWS LANDED 28P10/ TOTAL DURATION 3240P9 MIN/ MMTOWS SAMPLED 22P4/ MAMM 0P0///IDS OCT 4/ STOP.

To make the summation of minutes from Form 2US easier, enter duration on the form for each tow even if you also enter fishing times, counter to item 17 in instructions for 2US.

For Longline and Pot Fishing Vessels, paragraph 3 should look like this:

PARA 3/ A540/ TOTAL SETS 18P9/ TOTAL HOOKS 25200P9/ SOAK TIME 189P18 HRS 42P6 MIN/ STOP

(Be careful in dividing by 60 to obtain total hours and minutes!) Pot fishing vessels should substitute TOTAL POTS for TOTAL HOOKS.

TELEPHONE, RAPIDFAX, TELEX NUMBERS, ETC.

Alaska Fisheries Science Center (for sending or phoning catch messages; for between-trip debriefing) :

Telex: 329422 callback=NWASC-SEA
 (backup telex in Bldg.#1 at NWAFC = 9104442786)
Rapidfax: (206) 526-4004
Phones: (will accept collect calls)
 Angela Dougherty (206) 526-4191
 Russ Nelson (206) 526-4194
 Janet Wall (home phone) (206) 283-1690
 Message recorder phone (to leave catch messages or non-urgent messages
 on weekends, nights) You can leave up to a 5-minute message, (won't
 accept collect calls). (206) 526-4205

Address: Janet Wall
 Alaska Fisheries Science Center
 7600 Sand Point Way NE
 BIN C15700, Bldg. 4
 Seattle, WA 98115-0070

Alaska Regional Office

Telex: 45377 callback = NMFS AKR JNU
Rapidfax: (907) 586-7131
Phone: (907) 586-7229 (Janet Smoker/Jessie Gharrett)
Address: Janet Smoker
 National Marine Fisheries Service, FAK
 P.O. Box 1668
 Juneau, AK 99801

National Marine Fisheries Service, Kodiak Laboratory
(to store, or obtain access to stored gear)
Phone: (907) 487-4961 (-4962)
Address: P.O. Box 1638, Kodiak, AK 99615 (on Coast Guard base)

Alaska Department of Fish & Game (ADF&G)

ADF&G in Kodiak

phone: (907) 486-4791 (Leslie Watson)
address: 211 Mission Road, Kodiak AK 99615

ADF&G in Dutch Harbor (to obtain extra supplies from Foreign Fishery
Observer Program supplies)
Ken Griffin (907) 581-1239
Carolyn Griffin (907) 581-1529

11/15/89

FORMAT FOR DOMESTIC RADIO MESSAGES

If you are at sea for more than one week, prepare a catch message for transmission from the vessel and request that it be sent to NMFS in Seattle by telex or rapidfax. (See the letter of introduction for the different possibilities for transmission.) When preparing a message for fax transmission, use only plain, not lined, paper and write your message in larger than normal, block, dark lettering. If your messages are not being sent or are not getting through to our office, ask whether they are getting communications through to their company office. If they can send messages to their office, have your weekly message sent there with a note to the addressee such as, "Unable to transmit message to NMFS directly. Please forward this message to: Janet Wall/ AKC/ Seattle WA/ Telex 329422 (Callback NWASC SEA)/ Fax (206)526-4004/ Phone (206)526-4195."

If your vessel is unable to transmit any messages, or you are aboard a vessel for a week or less, (as is commonly the case in shoreside delivery vessels), or you have just gotten off a vessel and have the last few day's data to send in, phone in your catch message after you have returned to port. Instead of formatting a catch message as you do for transmission, fill out the RM-2 and RM-4 forms using the instructions given on the following pages. Call our logistics staff person and read the RM-2 and RM-4 information to them over the phone. Weekly radio messages are critical. Please remember, the data must be divided into report weeks which run from Sunday through Saturday, GMT time and date.

Also, NMFS will need to obtain copies of fish ticket(s) for your vessels. When phoning in catch information, or checking in after your cruise, please give the name of the vessel, the date(s) of catch deliveries, and the port catch was delivered to. With this information we will be able to request the proper fish ticket information from ADF&G.

On formatting for transmission, please notice the paragraph 3 containing effort and marine mammal information by subarea. For any take of marine mammals, designate the species with the species codes given in the instructions for Form 10US. As usual, we will need to know your first GMT day of sampling. The following sample radio message is from a U.S. catcher/processor that fished in Bering Sea subareas 513 and 511:

RAPIDFAX NO. OR TELEX NO.
TO: JANET WALL/ AKC/ SEATTLE WA
FROM: JANE OBSERVER/ SEA GULL/ TELEX /ORC 107P8

PARA 1/ AK-87-0001/ OCT 10/ US DOM/ OCT 4-6/ A513DP9/ DG3DOP3/ SQU 0D62P8/ TURB 5D34P12/ OFLAT 1D20P3/ POLL 83D37P21/ COD 18D21P12/ OTH 0D68P14/ NON 0D58P13/ TOTAL 110D00P2/// OCT 7-10/ A511P7/ DG4D0P4/ YELL 109D75P22/ TURB 8D24P14/ OFLAT 72D34P16/ POLL 6D58P19/ COD 24D52P13/ OTH 0D29P11/ NON 13D28P14/ TOTAL 235D00P10///

PARA 2/ US DOM/ OCT 4-6/ A513P9/ HW 85D0P13/ BLUKNG 29D0P11/ OTHKNG 4D0P4/ BTAN 81D0P9/ CHIN 12D0P3/// OCT 7-10/ A511P7/ HW 125D0P8/ REDKNG 3720D3P15/ BTAN 111D7P10/ OTHTAN 33D9P15/ HBT NOS 91D0P10 WT 360D55P19

PARA 3/ A513P9/ TOWS 20P2/ DUR 2520P9 MIN/ MMTOWS 20P2/ CU 1P1/// A511P7/ TOWS 28P10/ DUR 3240P9 MIN/ MMTOWS 22P4/ MAMM 0P0///IDS OCT 4/ STOP.

To make the summation of minutes from Form 2US easier, enter duration on the form for each tow even if you also enter fishing times, counter to item 17 in instructions for 2US.

For Longline and Pot Fishing Vessels, paragraph 3 should look like this:

PARA 3/ A540P9/ TOTAL SETS 18P9/ TOTAL HOOKS 25200P9/ SOAK TIME 189P18 HRS 42P6 MIN/ STOP

(Be careful in dividing by 60 to obtain total hours and minutes!) Pot fishing vessels should substitute TOTAL POTS for TOTAL HOOKS.

TELEPHONE, RAPIDFAX, TELEX NUMBERS, ETC.

Alaska Fisheries Science Center (for sending or phoning catch messages; for between-trip debriefing) :

Telex: 329422 callback=NWASC-SEA
 (backup telex in Bldg.#1 at NWAFC = 9104442786)
Rapidfax: (206) 526-4004
Phones: (will accept collect calls)
 Angela Dougherty (206) 526-4191
 Russ Nelson (206) 526-4194
 Janet Wall (home phone) (206) 283-1690
 Message recorder phone (to leave catch messages or non-urgent messages on
 weekends, nights) You can leave up to a 5-minute message, (won't accept
 collect calls). (206) 526-4205

Address: Janet Wall
 Alaska Fisheries Science Center
 7600 Sand Point Way NE
 BIN C15700, Bldg. 4
 Seattle, WA 98115-0070

Alaska Regional Office

Telex: 45377 callback = NMFS AKR JNU
Rapidfax: (907) 586-7131
Phone: (907) 586-7229 (Janet Smoker/Jessie Gharrett)
Address: Janet Smoker
 National Marine Fisheries Service, FAK
 P.O. Box 1668
 Juneau, AK 99801

National Marine Fisheries Service, Kodiak Laboratory

(to store, or obtain access to stored gear)
Phone: (907) 487-4961 (-4962)
Address: P.O. Box 1638, Kodiak, AK 99615 (on Coast Guard base)

Alaska Department of Fish & Game (ADF&G)

ADF&G in Kodiak
 phone: (907) 486-4791 (Leslie Watson)
 address: 211 Mission Road, Kodiak AK 99615

ADF&G in Dutch Harbor (to obtain extra supplies from Foreign Fishery
Program supplies)
 Ken Griffin (907) 581-1239
 Carolyn Griffin (907) 581-1529

Observer

GENERAL INSTRUCTIONS FOR WEEKLY CATCH MESSAGES

One of the primary tasks of the Observer Program is the estimation of the catch of groundfish and prohibited species throughout the year to insure that these catches remain within the quotas established by the management councils. In order that the observer's data may be utilized before returning from sea, a catch message is sent each week to the Alaska Fisheries Science Center summarizing the week's fishing activity. The first paragraph of the message will give the estimated catch by species group (species composition data) for each area, the second paragraph will provide data on the catch of prohibited species, and the third paragraph will provide fishing effort information and a marine mammal catch report.

The report week for each message will always run from SUNDAY through SATURDAY, Greenwich Mean Time and date regardless of the date the message is actually sent. The reporting areas to be used for catch messages are shown in the maps on the following pages. The catch report messages should be sent on the Sunday following the report week. Catch messages are critical and must be sent on time. When asked to repeat a message, please do so immediately and do not wait until the end of the week.

When you are at sea for more than one week, prepare a catch message for transmission from the vessel and request that it be sent to NMFS in Seattle by telex or rapidfax. (See the letter of introduction for the different possibilities for transmission.) When preparing a message for fax transmission, use only plain, not lined, paper and write your message in larger than normal, block, **dark** lettering. If your messages are not being sent or are not getting through to our office, ask whether they are getting communications through to their company office. If they can send messages to their office, have your weekly message sent there with a note to the addressee such as, "Unable to transmit message to NMFS directly. Please forward this message to: Janet Wall/ AKC/ Seattle WA/ Telex 329422 (Callback NWASC SEA)/ Fax (206)526-4004/ Phone (206)526-4195."

Failing this, it may be possible to phone in your weekly message via a ship-to-shore, collect, radio telephone call. Call Angela Dougherty collect at (206)526-4191. Whenever catch (or any other) information is being relayed by radio telephone, anyone can listen and it must be kept in mind that the conversation is public. As catch information must be kept confidential, be sure to follow the RM-2 and RM-4 data format and use the number codes **only** for the species. Do not voice the species names with their catch tonnages. Using codes would also be appropriate when relaying catch information for one vessel from another, subsequent vessel.

If your vessel is unable to transmit any messages, or you are aboard a vessel for a week or less, (as is commonly the case in shoreside delivery vessels), or you have just gotten off a vessel and have the last few day's data to send in, phone in your catch message after you have returned to port. Instead of formatting a catch message as you do for transmission, fill out the keypunch forms RM-2 and RM-4 using the instructions given on following pages. Call our logistics staff person and read the RM-2 and RM-4 information to them over the phone. Keep a copy of all messages sent and received. You will be asked to transfer the weekly catch message information to forms RM-2 and RM-4 for verification purposes upon your return to Seattle.

FORMATTING CATCH MESSAGES FOR AT-SEA TRANSMISSION

This section of the instructions describes how to format a weekly catch message for transmission via telex or fax from a ship at sea. Remember that the weekly catch report is a high priority responsibility. Do not neglect to send these figuring, "When I get back to port will be soon enough." Only if your vessel will be at sea for seven days or less, or you are returning to port before the end of the report week, should you wait until you are in port and use the instructions for forms RM-2 and RM-4. Those forms must be filled out eventually for each weekly message anyway, and are used as a more convenient format for telephoning your data to the office.

The following abbreviations are to be used in formatting your catch messages:

A represents area

DG represents days on grounds

D represents a decimal point (put in each catch figure, even if tonnage is a whole number; i.e. 125 mt should be sent as 125D0P8).

P represents the numerical check which is the sum of the actual value of the digits in the weight or number being reported.

/ represents the equivalent of a comma in a sentence.

/// represents the equivalent of a period in a sentence.

STOP means "end of message".

The first lines are your heading or address. The "TO:" line should always read: "JANET WALL/ AKC/ SEATTLE WA". The "FROM: ____" should be written with the information shown below. The ORC number is a security code entry which will be explained to you in training.

TO: JANET WALL/ AKC/ SEATTLE WA

FROM: Your name/ vessel name/ vessel's telex or fax number/ ORC 107P8

If you are transferred to a new ship during a report week, you must report the catch and effort data for the period spent on each ship separately. Preferably, you will be able to pass the catch information to us from port before boarding your next vessel. If this is not possible, and your next port call is more than a week away, your only option at this time is to call collect via radio telephone, and use the RM-2 and RM-4 format and numerical species codes (refer to the fourth paragraph of the first page of the catch report section). Protect the confidentiality of the data. Do not send data for one ship from another ship of a different company.

After the heading comes the body of the message. The first paragraph of the message

will contain the species composition information. Label this as "PARA 1." After the phrase "PARA 1/", the vessel's permit number should be written. The vessel's fishing permit number has the format AK-87-0001; where "AK" abbreviates Alaska, "87" indicates the year, and the last four digits are a specific identifier of that vessel.

TO: JANET WALL/ AKC/ SEATTLE WA
FROM: JANE OBSERVER/ SEA GULL/ TELEX 482935/ ORC 107P8

PARA 1/ AK-87-0001/ OCT 10/ US DOM/ OCT 4-6/ A513P9/ DG3DOP3/

Next, the Saturday date of the report week should be entered. Each report week is referenced by the week's ending date even if, say, you were only reporting data for Sunday and Monday of that week. For any dates reported in catch messages, **use only these three letter abbreviations for the month: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC.** Following the week ending date, identify the message as coming from a U.S. domestic vessel by writing "US DOM" meaning "U.S. domestic".

The next items written are a list of the inclusive **dates** of the observer days on grounds in the area, the statistical area, and the **number** of observer days on grounds. The number of observer days on the grounds (DG) is simply the number of calendar days during the seven-day period (Sun-Sat) spent in each area. Both fishing and non-fishing days are counted. **Days spent in transit, transferring cargo, or sitting out rough weather are considered normal days on the grounds. Do not include phrases informing us of these normal activities.**

The only time a day is not an observer day on grounds is when the ship is fishing and you don't sample, or when the ship is in port.

If the ship traverses an area in which it does not fish, then add to your catch message the date, area, days on grounds, and reason. (Example: Aug 18/ A620P8/ DG 1D0P1/ traversing/). If the vessel fishes in two areas in one day, divide the day proportionally to the actual time spent in each area. For example, if on your vessel, 40% of the day occurred in Area 521 and 60% in Area 522, then 0.4 of the day is attributed to Area 521, and 0.6 of the day to Area 522.

During your first week on board each vessel, you will only include the number of days beginning with your first day of sampling. The week that you get off a ship, days on grounds should end with your last sampling day. Days on grounds for all other weeks at sea will add up to 7 or should be accounted for in the message. The ship's captain is required to accurately report changes in fishing area and should therefore be recording the GMT time of the area change. In a proper catch message, all seven days will be accounted for and each area entered will only be listed once.

After this information, list the abbreviated names and the weights of each species report group (by area) in the same order as is given in the list of report group abbreviations for that

REPORTING GROUPS FOR SPECIES COMPOSITION RADIO MESSAGES

Bering Sea/Aleutians (Areas 510 - 550)

<u>Species Group</u>	<u>Report Group</u>	<u>Abbreviation</u>
Squid	Squid	SQU
Yellowfin sole	Yellowfin sole	YELL
Rock sole	Rock sole	RSOLE
Greenland turbot	Greenland turbot	TURB
Arrowtooth flounder	Arrowtooth Flounder	ARROW
Kamchatka flounder		
Other flatfish (except halibut)	Other flatfish	OFLAT
Pollock	Pollock	POLL
Pacific cod	Pacific cod	COD
Sablefish	Sablefish	SAB
Atka mackerel	Atka mackerel	ATKA
Pacific ocean perch		
Rougheye rockfish		
Northern rockfish	POP Complex *	POP
Sharpchin rockfish		
Shortraker rockfish		
All other rockfish (<u>Sebastes</u> and <u>Sebastolobus</u> spp.)	Other rockfish	OROCK
Herring	Herring	HER
Sharks, skates, sculpins, eulachon, smelts, capelin and octopus only	Other fish	OTH
All remaining fish spp.		
Prohibited spp. (except herring)		
Invertebrates (except squid and octopus)	Non-allocated	NON
Miscellaneous items		

* The POP report group has changed to a group containing the following five rockfish species: Pacific ocean perch, Rougheye rockfish, Northern rockfish, Sharpchin rockfish and Shortraker rockfish.

Gulf of Alaska (Areas 610 - 680)

<u>Species Group</u>	<u>Report Group</u>	<u>Abbreviation</u>
Squid	Squid	SQU
All flatfish (except halibut)	Flatfish	FLAT
Pollock	Pollock	POLL
Pacific cod	Pacific cod	COD
Sablefish	Sablefish	SAB
Atka mackerel	Atka mackerel	ATKA
Pacific ocean perch (<u>S. alutus</u>)	Slope Rockfish	SLPRF
Northern rockfish (<u>S. polyspinus</u>)		
Rougheye rockfish (<u>S. aleutianus</u>)		
Sharpchin rockfish (<u>S. zacentrus</u>)		
Shortraker rockfish (<u>S. borealis</u>)		
Aurora rockfish (<u>Sebastes aurora</u>)		
Blackgill rockfish (<u>S. melanostomus</u>)		
Chilipepper rockfish (<u>S. goodei</u>)		
Darkblotched rockfish (<u>S. crameri</u>)		
Greenstriped rockfish (<u>S. elongatus</u>)		
Harlequin rockfish (<u>S. variegatus</u>)		
Pygmy rockfish (<u>S. wilsoni</u>)		
Red banded rockfish (<u>S. babcocki</u>)		
Shortbelly rockfish (<u>S. jordani</u>)		
Splitnose rockfish (<u>S. diploproa</u>)		
Stripetail rockfish (<u>S. saxicola</u>)		
Vermilion rockfish (<u>S. miniatus</u>)		
Yellowmouth rockfish (<u>S. reedi</u>)	Demersal Shelf Rockfish	DEMRF
Bocaccio (<u>Sebastes paucispinus</u>)		
Canary rockfish (<u>S. pinniger</u>)		
China rockfish (<u>S. nebulosus</u>)		
Copper rockfish (<u>S. caurinus</u>)		
Quillback rockfish (<u>S. maliger</u>)		
Redstripe rockfish (<u>S. proriger</u>)		
Rosethorn rockfish (<u>S. helvomaculatus</u>)		
Silvergray rockfish (<u>S. brevispinus</u>)		
Tiger rockfish (<u>S. nigrochinctus</u>)		
Yelloweye rockfish (<u>S. ruberrimus</u>)	Pelagic Shelf Rockfish	PELRF
Black rockfish (<u>Sebastes melanops</u>)		
Blue rockfish (<u>S. mystinus</u>)		
Dusky rockfish (<u>S. ciliatus</u>)		
Widow rockfish (<u>S. entomelas</u>)		
Yellowtail rockfish (<u>S. flavidus</u>)	Thornyhead Rockfish	THRN
Longspine thornyhead (<u>Sebastolobus altivelis</u>)		
Shortspine thornyhead (<u>Sebastolobus alascanus</u>)	Other fish	OTH
Sharks, skates, sculpins, eulachon smelts, capelin and octopus <u>only</u>		
All remaining fish spp.	Non-allocated	NON
Prohibited spp. (includes herring)		
Invertebrates (except squid and octopus)		
Miscellaneous items		

region. Species with zero catch do not need to be reported. Lastly, give a total tonnage by area. In para 1, weights may be reported to two or to three decimal places. Whichever you choose, (two or three decimal places), be consistent in paragraph 1 for the week. Remember that the sum of the report group weights must equal the total weight for that area exactly. This completes the species composition portion of the catch message for all vessel types.

The following is the heading and first paragraph of the sample catch message. In this example, the vessel Sea Gull fished in two areas during the week ending October 10. The data has been calculated by area and will be presented by area within each paragraph. In paragraph one, the data for the second area starts with the dates of the observer days on grounds, the area corresponding to those dates and the number of observer days on grounds.

TO: JANET WALL/ AKC/ SEATTLE WA
FROM: JANE OBSERVER/ SEA GULL/ TELEX 482935/ ORC 107P8

PARA 1/ AK-87-0001/ OCT 10/ US DOM/ OCT 4-6/ A513P9/ DG3DOP3/ SQU
0D62P8/ TURB 5D34P12/ OFLAT 1D20P3/ POLL 83D37P21/ COD 18D21P12/ OTH
0D68P14/ NON 0D58P13/ TOTAL 110D00P2///
OCT 7-10/ A511P7/ DG4D0P4/ YELL 109D75P22/ TURB 8D24P14/ OFLAT
72D34P16/ POLL 6D58P19/ COD 24D52P13/ OTH 0D29P11/ NON 13D28P14/ TOTAL
235D00P10///

Paragraph 2 is a summary of the incidental catch of prohibited species information for the week. Begin paragraph 2 with "PARA 2", then identify the data as before with "US DOM". Then write the inclusive dates of the days on grounds in that area, the statistical area, and the sum of the haul weights sampled for prohibited species. The sum of the haul weights is written as "HW", followed by the sum of Column A from Form RM-3. Lastly, list the species report groups and their calculated numbers to tenths and halibut weights to hundredths. Use the following list of report groups and their abbreviations.

<u>Abbreviations</u>	<u>Meaning</u>
HW	haul weights, the sum of Column A on Form RM-3
REDKNG	Red King Crab
BLUKNG	Blue King Crab
OTHKNG	Golden & Couesi King Crab
BTAN	Bairdi Tanner Crab
OTHTAN	Opilio, Angulatus, & Tanneri Tanner Crab
HBT	Pacific Halibut
CHIN	Chinook Salmon
OTHSAL	the other four species of salmon
NOS, WT	numbers and weight, both are reported for halibut

The continuation of the message example shown below shows paragraph 2 and 3. The instructions for paragraph three follow. Notice again the two parts of each paragraph for each area.

PARA 2/ US DOM/ OCT 4-6/ A513P9/ HW 85D0P13/ BLUKNG 29D0P11/ OTHKNG 4D0P4/ BTAN 81D0P9/ CHIN 12D0P3/// OCT 7-10/ A511P7/ HW 125D0P8/ REDKNG 3720D3P15/ BTAN 111D7P10/ OTHTAN 33D9P15/ HBT NOS 91D0P10 WT 360D55P19

PARA 3/ A513P9/ TOWS 20P2/ DUR 2520P9 MIN/ MMTOWS 20P2/ CU 1P1/// A511P7/ TOWS 28P10/ DUR 3240P9 MIN/ MMTOWS 22P4/ MAMM 0P0///IDS OCT 4/ STOP.

For Trawlers: Paragraph 3 contains effort and marine mammal information by subarea. Observers should enter the number of hauls taken (tows landed) from each area for the week. Then, sum the minutes of fishing duration of these tows from Form 2US. Leave the duration in minutes; do not convert it to hours and minutes. Observers on trawlers next enter the number of randomly chosen tows which were monitored for incidental catch of marine mammals. On a trawler, the number of tows sampled for marine mammals would be at least the number of hauls sampled and could be as much as all the tows landed, (by area). For any incidental catch of a marine mammal, designate the species with the two letter species code given in the instructions for Form 10US. Only freshly dead or "lethally removed" mammals that are landed are to be reported. If no marine mammals were caught, use the notation "MAMM 0P0" as shown for area 511 in the example above.

For Longline and Pot Fishing Vessels, paragraph 3 should look like this:

PARA 3/ A540P9/ TOTAL SETS 18P9/ TOTAL HOOKS 25200P9/ SOAK TIME 189P18 HRS 42P6 MIN/ STOP

(Be careful in dividing by 60 to obtain total hours and minutes!) Pot fishing vessels should substitute TOTAL POTS for TOTAL HOOKS. As longline and pot fishing vessels virtually never catch marine mammals, observers on longliners and potfishing vessels need not report any marine mammal information in catch messages.)

The last entry that may need to be added to your catch message is an "Initial Date of Sampling" (IDS). You must inform us of your first day of sampling whenever you start work aboard a different ship, or start a new set of cruise data aboard the same ship. Use the following code at the end of your first two catch messages, "IDS mo. day". The IDS date is important to the observer program's data organization. Therefore, please repeat the IDS date in your second catch message to insure that it is received correctly and so we will know whether or not we received your first message. (Note that the "days on grounds" for the first week begins with this day. Example: if you start sampling on a GMT Thursday, days on grounds will total 3 days for that week and Thursday's date is the IDS date.)

After an IDS date, (if needed), the observer could include any question or information relating to observer work. For example, questions about observer sampling or responsibilities, information about health problems, or logistical information are common in catch messages. A question or information should be written carefully so it is unmistakably clear, not too wordy, and appropriate and professional. To conclude, the word "STOP" indicates the end of the message.

DETERMINING THE ADF&G STATISTICAL AREA

Observers on U.S. trawlers are being asked to indicate on the Form 2US the ADF&G statistical area that the vessel was in at the time the retrieval of the trawl was begun. Observers on longline or pot vessels are to record on Form 1US the area that the position of vessel was in at the time the retrieval of the set was completed. ADF&G statistical areas are necessary to help compare observer data with fish ticket data and to help match ADF&G observer data when a combined data base is established.

The enclosed maps should help the observer determine which ADF&G statistical area the catch should be attributed to. In general, most ADF&G areas are squares one degree of longitude by 1/2 degree of latitude. The areas away from any land mass are generally the most regular in size and shape, and are numbered in a standard convention. For areas east of 180°, the first two digits in the number are the degrees of longitude (discard the first digit in the longitude, a 1). The second two digits in the number are the degrees of latitude, and the last two digits indicate whether the block is the lower one-half degree of latitude (00 to 29 minutes latitude) or the upper one-half degree of latitude (30 to 59 minutes latitude). If the latitude is 00 to 29 minutes, then the last two digits designating the statistical area are generally 00; if the minutes of latitude are 30 to 59 minutes, then the last two digits are usually 30. The position 55°13' N lat., 144°35' W long. would thus be in ADF&G statistical area 445500.

Positions located on an even longitude or latitude (the margin of a statistical area) are included in the block to the west or the north. Another way of stating the same thing is that positions on the bottom or right-hand margin should be included in the block, but those on the top or left-hand margin should be included in the adjacent blocks. Thus, position 45°30' N lat., 156°00' W long., in the lower right-hand corner of area 564530, would be designated 564530, while position 45°30' N lat., 157°00', in the lower left-hand corner of the same block would be designated 574530.

For areas west of 180° (all positions designated by E long.), check the area designation on the maps. The first two digits will not be the longitude because that would repeat the designation of areas to the east. For each whole degree of longitude west of 180°, add a 1 to 80 to obtain the first two digits. Thus, 51°06' N 178°15'E would be in ADF&G area 825100.

The attached maps should be used to check the statistical area designation of all positions. When blocks are close to land forms, they are more likely to have a different shape and have a different designation for the last two digits. As you will notice by examining the charts, areas inside the 3-mile limit indicating Alaska state waters are given numbers ending in 1 to 9, and are usually very irregular in shape. Areas of the FCZ touching those areas, often have a last digit ending in a 2 (but not always), and the areas are frequently broken up into two or more smaller areas. It is thus necessary to consult the more detailed maps to determine the correct designation whenever the position is in a block close to a landmass.

